1. Add product-filter.pipe.ts file under products folder. Include the PipeTranform implementation for custom pipe.

```typescript
product-filter.pipe.ts

import { PipeTransform, Pipe } from 'angular2/core';
import { IProduct } from './product';

@Pipe({
    name: 'productFilter'
})
export class ProductFilterPipe implements PipeTransform {

    transform(value: IProduct[], args: string[]): IProduct[] {
        let filter: string = args[0] ? args[0].toLocaleLowerCase() : null;
        return filter ? value.filter((product: IProduct) =>
            product.productName.toLocaleLowerCase().indexOf(filter) != -1) :
value;
    }
}
```

2. Once PipeTrasform implementation is ready add this in you product-list.component.ts file as mentioned below:

```typescript
product-list.component.ts

import { Component, OnInit } from 'angular2/core';
import { IProduct } from './product';
import { ProductFilterPipe } from './product-filter.pipe';
@Component({
    selector: 'pm-products',
    templateUrl: 'app/products/product-list.component.html',
    styleUrls: ['app/products/product-list.component.css'],
    pipes: [ProductFilterPipe]

})
export class ProductListComponent implements OnInit{
    pageTitle: string = 'Product List';
    imageWidth: number = 50;
    imageMargin: number = 2;
    showImage: boolean = false;
    listFilter: string = 'cart';
    products: IProduct[] = [
        {
            "productId": 2,
            "productName": "Garden Cart",
```

```json
            "productCode": "GDN-0023",
            "releaseDate": "March 18, 2016",
            "description": "15 gallon capacity rolling garden cart",
            "price": 32.99,
            "starRating": 4.2,
            "imageUrl": "https://encrypted-
tbn0.gstatic.com/images?q=tbn:ANd9GcRZhmstt7Kkdk5kyMv9mxJyh9sPUBvY9poTrxcl-
SCAUa3WmUVZQA"
        },
        {
            "productId": 5,
            "productName": "Hammer",
            "productCode": "TBX-0048",
            "releaseDate": "May 21, 2016",
            "description": "Curved claw steel hammer",
            "price": 8.9,
            "starRating": 4.8,
            "imageUrl": "https://encrypted-
tbn0.gstatic.com/images?q=tbn:ANd9GcSlXJdOiLq-d9v2-
UDfTlQFF3IuhdNMoE1ok1pAgwqubZaZqQJ9"
        }
    ];

    toggleImage(): void{
        this.showImage = !this.showImage;
    }

    ngOnInit(): void{
        console.log('Init Invoked!')
    }

}
```

3. Use the custom pipe which we have created in product-list.component.html file
   along with ngFor directives to filter products.

product-list.component.html

```html
<div class='panel panel-primary'>
    <div class='panel-heading'>
        {{pageTitle}}
    </div>
    <div class='panel-body'>
        <div class='row'>
            <div class='col-md-2'>Filter by:</div>
            <div class='col-md-4'>
```

```html
                    <input type='text' [(ngModel)]='listFilter'/>
                </div>
            </div>
            <div class='row'>
                <div class='col-md-6'>
                    <h3>Filtered by: {{listFilter}} </h3>
                </div>
            </div>
            <div class='table-responsive'>
                <table class='table' *ngIf='products && products.length'>
                    <thead>
                        <tr>
                            <th>
                                <button class='btn btn-primary'
                                 (click) = 'toggleImage()'>
                                    {{showImage ? 'Hide' : 'Show'}} Image
                                </button>
                            </th>
                            <th>Product</th>
                            <th>Code</th>
                            <th>Available</th>
                            <th>Price</th>
                            <th>5 Star Rating</th>
                        </tr>
                    </thead>
                    <tbody>
                        <tr *ngFor='#product of products | productFilter:listFilter'>
                            <td>
                                <img *ngIf='showImage'
                                [src]='product.imageUrl'
                                [title]='product.productName'
                                [style.width.px]='imageWidth'
                                [style.margin.px]='imageMargin'>
                            </td>
                            <td>{{product.productName}}</td>
                            <td>{{product.productCode | lowercase }}</td>
                            <td>{{product.releaseDate}}</td>
                            <td>{{product.price | currency:'USD':true:'1.2-2'}}</td>
                            <td>{{product.starRating}}</td>
                        </tr>
                    </tbody>
                </table>
            </div>
        </div>
</div>
```
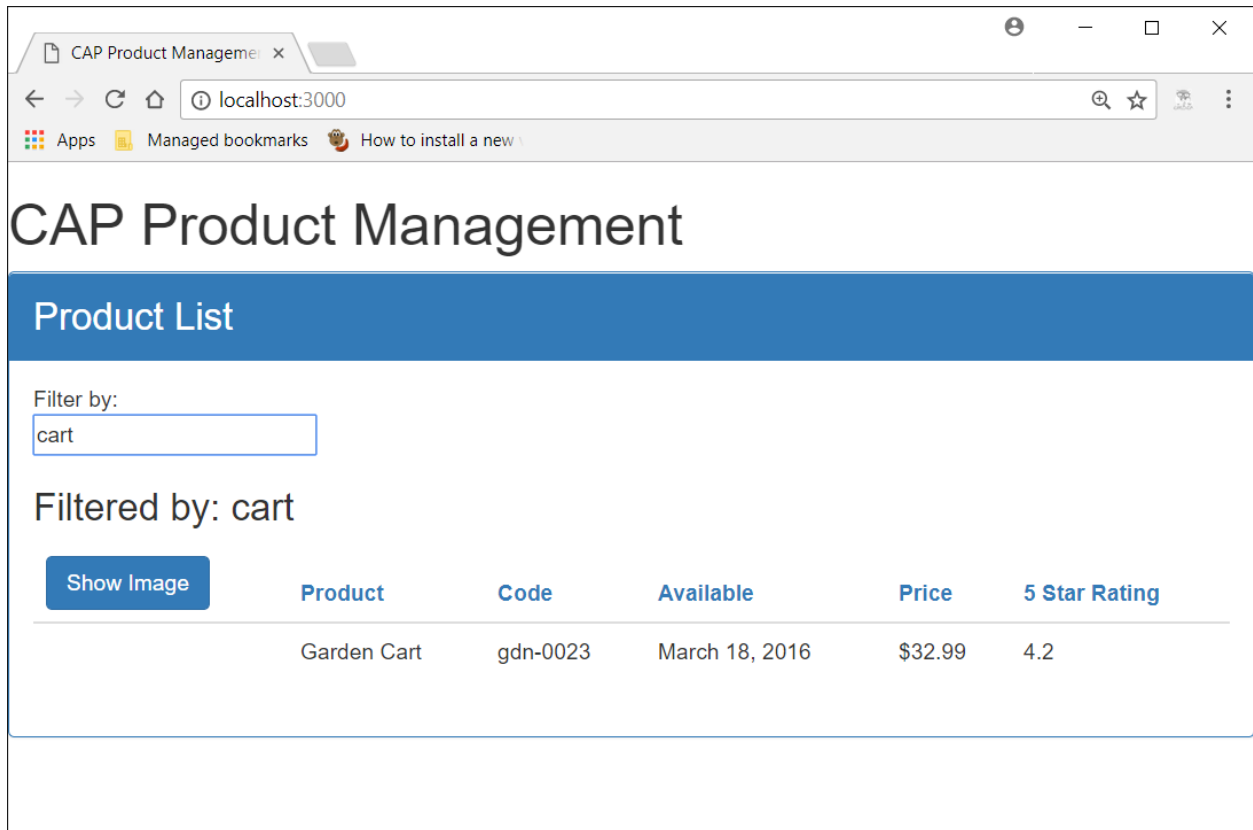
Now you can check your browser

localhost:3000

CAP Product Management

Product List

Filter by:

am

Filtered by: am

Show Image	Product	Code	Available	Price	5 Star Rating
	Hammer	tbx-0048	May 21, 2016	$8.90	4.8